

(19)The Korean Intellectual Property Office (KR) Unexamined Patent Application (A)

(51) Int.Cl. 6

A23L 1/337

Application No	10-2002-0048889
Application Date	2002-08-19
Publication No	KR2002-0070942.
Publication Date	2002-09-11
Agent	Yu Kim
	In-Je Cho
Inventor	Jun-Cheol Kim
Applicant	Jun-Cheol Kim
Examination	Requested
Title of Invention	Laver broiling apparatus



Abstract

The invention relates to the seaweed broiling apparatus in which the mixing vessel is separately equipped in the conventional seaweed broiling apparatus, and it adopts the mode which utterly mixes the raw material to the agitating vane of the screw type, and the spice input and opening and shutting are implemented.



Representative Drawing(s)

Fig. 4



Keyword(s)

The laver, green laver, macroalgae, roasting, salted dry fish.



Description

※ Brief Explanation of the Drawing(s)

Following drawings appended to this specification exemplify the preferred embodiment of the present invention. And the role of more making the technical spirit of the present invention understand is played with the detailed description of the invention which will be described later. Therefore, it is interpreted in a matter in that drawing with the Han JeongDoe and the invention must not.

Fig. 1 is the appearance perspective view about the conventional seaweed broiling apparatus.

Figure 2 is a coarse profile showing one side inside of the conventional seaweed broiling apparatus

Figure 3 is a coarse profile showing the other side inside of the conventional seaweed broiling apparatus

Figure 4 is a coarse profile showing one side inside of the seaweed broiling apparatus according to the invention

Figure 5 is a perspective view showing the agitating vane according to the invention

Figure 6 is a partial enlarged view showing the switching means according to the invention

Figure 7 is an enlarged top view showing the inside of the spice box according to the invention

Figure 8 is a perspective view showing the other agitating vane according to the invention.

The description • of the denotation about the main part of • drawing.

10: case 15: control panel.

16: timer 20, 50: driving means.

30: the roasting container 34, 64: vent.

40, 70: switching means 60: mixing vessel.

80: carrying box 90, 100: the agitating vane.

110: spice box 120: the sesame oil container.

130: cooking oil bottle.

※ Details of the Invention

※ Purpose of the Invention

※ The Technical Field to which the Invention belongs and the Prior Art in that Field

The invention relates to the Macroalgae roaster, more specifically, to the Macroalgae roaster in which the mixing vessel is separately equipped, and it adopts the mode which utterly mixes the raw material to the agitating vane of the screw type, and the spice input and opening and shutting are implemented.

Generally, as useful nutrient for the Macroalgae (hereinafter it calls because of being " salted dry fish ".) mixing laver and green laver is the human body is food having the remarkable effect that is included with large amount and makes the Zingiberis Rhizoma promoted but, it is above anything else important to cook this salted dry fish according to the gummy of consumer and supply.

Previously, laver and green laver were put into skillet etc. if wanted to parch the salted dry fish. After the cooking oil, sesame, the salt etc. were thus mixed, until it was determined because cook was appropriate, it parched and it cooked.

Therefore, it had the problem that the taste was changed whenever the process of making the salted dry fish depended on upon the eye measure or the sensation of cook and it parched the salted dry fish. And the cost exhausted in made moreover, the salted dry fish of the bulk was excessive.

Thus, the seaweed broiling apparatus which automatically pesters the salted dry fish due to set for hour, and the set temperature in order to resolve this problem is developed. It is disclosed in KR20-265539 Y (fig. 1 a , refer to Figure 3).

Provided is the seaweed broiling apparatus which after as to the content of technique of the above-described Utility Model Registration sets the predetermined time and constant temperature in the timer (18) and temperature controller (16), if it permits the power in the motor (12) and heater (7), it continuously mixes the salted dry fish within the roasting vessel (4) while the agitating vane (15) is rotated, and at this time, the fixed temperature the roasting vessel (4) is maintained by the temperature controller (16), and if the set time goes by the timer (18), the salted dry fish within the roasting vessel (4) is put into the carrying box (20) while the cover (6) of the roasting vessel (4) is automatically opened, and automatically can parch the salted dry fish.

But in case of the seaweed broiling apparatus, the agitating vane (15) was employed and the raw material was continually mixed. But at the same time, spice by the roasting of the salted dry fish and passive administration were seasoned in the roasting vessel (4). Therefore, the phenomenon that the raw material got on on the coating face of the roasting vessel (4) was unable to be completely overcome and the taste of the salted dry fish was degraded. The input of spice of man was due to and the part was made and it was impossible to the fixed quantity supply. The input had the problem that it was inconvenient.

» The Technical Challenges of the Invention

It is an object of the present invention to provide the seaweed broiling apparatus in which it is founded in order to solve the overall problem as described above, and the mixing vessel is separately equipped in the conventional seaweed broiling apparatus, and it adopts the mode which utterly mixes the raw material to screw, and the spice input and opening and shutting are made.

Hereinafter another object of the present invention and advantages will be explained. And it knows with the operation of the present invention. Moreover, the object of the present invention and advantages can be realized by the means and the combination shown for the attached patent claim.

» Structure & Operation of the Invention

As to the seaweed broiling apparatus of the present invention for achieving the purpose as described above, as the roasting container (30) for parching the salted dry fish and the roasting apparatus consisting of the agitating vane (90), the caster (14) is equipped in the upper side in the cover (11) and bottom surface. The case (10) in which a plurality of parts is adhered and the switching means (40) equipped in the roasting container (30) one side in which the vent (34) is formed on the top of the case (10) of u-shaped and the first gear (44) which delivers the torque to the second gear (43) the second gear (43) connected in the switching means (40) to the door (41) is connected to the speed reduction motor (45) which delivers the power is inserted in the driving shaft (42) and spice box (110) and the sesame oil container (120) consecutively equipped in the mixing vessel (60) in which the driving means (50) mixing up the salted dry fish which is installed at the roasting container (30) upper center in the agitating vane (90) of the driving shaft (21) and streamlined shape and the case (10) central part which evenly mixes the salted dry fish while being connected and installed and being rotated according to the inner circumference of the roasting container (30) and parched in spice is formed of u-shaped and upper one side of the case (10). When when being connected to the cooking oil bottle (130) and hose at the upper part

of the cooking oil bottle (130) and roasting container (30) and parching the salted dry fish, being connected to the sesame oil container (120) and hose at the upper part of the cooking oil line (131) and the mixing vessel (60) in which the nozzle (132) in which the cooking oil is emitted is equipped to the constant interval and mixing the salted dry fish with spice, the nozzle (122) in which the sesame oil is emitted is installed at the lower part of the sesame oil line (121) and the mixing vessel (60) vent (74) equipped to the constant interval and the carrying box (80) putting in the salted dry fish dropped down earlier than in the vent (74), and the control panel (15) are included. As to the control panel (15), the electronic circuit setting the rotation quantity of the motor (23) (53) and speed reduction motor (45) (75) and time, and spice, the cooking oil and quantity of sesame oil and is automatically operated is adhered.

Preferably, this seaweed broiling apparatus more can include the first touch switch (46) which is adhered to one side of the vent (34) and controls the angle of elevation of the door (41) and the second touch switch (47) controlling the angle of depression. It more can include the jet cutter prop (114) controlling the gear (111) which mixes sauce while going in gear between the screw (112) which is connected to the motor at the lower part of the spice box (110) and spice is withdrawn to the discharge hole (113) formed in the cap (115) and rotating and the spice ejected through the discharge hole (113) as the predetermined amount. And the above-described agitating vane (90) of the streamlined shape can be made of the round pipe.

The preferred embodiment of the present invention decides to be particularly illustrated with reference to the drawing attached below.

Figure 4 is a coarse profile showing one side inside of the seaweed broiling apparatus according to the preferred embodiment of the present invention. Figure 5 is a perspective view showing the agitating vane. Figure 6 is a partial enlarged view showing door is the open state. Figure 7 is an enlarged top view showing the inside of the spice box. Figure 8 is a perspective view showing the other agitating vane.

The invention improves the conventional seaweed broiling apparatus (KR20-265539 Y). The mode mixing the salted dry fish with the roasting container (30) in which the temperature controller (13) is attached and the agitating vane (90) connected to the driving means (20) is identical.

The cover (11) of the case (10) upper end is opened. If the heater (32) and adiabatic material (33) are built in, it is connected to the temperature controller (13) and the salted dry fish is injected within the roasting container (30) which is set to the constant temperature, while one agitating vane (90) rotates the screw type phase connected to the driving means (20) of the streamlined shape according to the circumferential surface of the coating plate (31), the salted dry fish is evenly mixed. The driving means (20) delivers the power the chain (22) between the agitating vane (90), the driving shaft (21) and the inserted power motor (23) to intermediation.

The above-described agitating vane (90) crosses the steel plate cut to the constant width of 2 on the screw type of the streamlined shape. The agitating vane (90) evenly mixes the salted dry fish according to the circumferential surface of the roasting container (30).

At this time, the cooking oil line (131) equipped on the top of the roasting container (30) is connected to the cooking oil bottle (130) and hose. The constant interval nozzle (132) is formed and the cooking oil of the set predetermined amount is jetted on the control panel (15) at evenly and the salted dry fish does not get and it parches.

The salted dry fish parched is put into through the vent (34) developed in the roasting container (30) down center into the mixing vessel (60). The door (41) equipped in the switching means (40) which the predetermined time is set is automatically opened and closed.

Here, it goes in gear with the first gear (44) connected to the speed reduction motor (45) which is adhered to the second gear (43) which as shown in the figure, is particularly connected to fig. 6 to the driving shaft (42) and delivers the power and the door (41) opening and closes the vent (34) rotates up and down. At this time, the first touch switch (46) which is connected to the control panel (15) in order to control the up and down

rotation angle and is adhered to the vent (34) left side and controls the angle of elevation of the door (41) and the second touch switch (46) which is adhered to the vent (34) right side and controls the angle of depression of the door (41) are equipped. And if the first touch switch (46) is pressed in the supination of the door (41) or the second touch switch (46) is pressed after the predetermined time in the pronation of the door (41), the forward rotation of the speed reduction motor (45) and operation of counter-rotating are stopped.

As described above, it parches and the salted dry fish dropped down earlier than through the vent (34) within the mixing vessel (60) is installed at the upper part of the mixing vessel (60). It is connected to the sesame oil container (120) and hose and the sesame oil is emitted to evenly through the sesame oil line (121) in which the constant interval nozzle (122) is formed.

At this time, the spice which is in the spice box (110) is put into. And if this fig. 7 is used, as described in detail, spice is injected in the spice box (110), spice is pushed towards the discharge hole (113) in which the screw (112) connected to the motor shaft is formed in the cap (115) to be in a specific direction rotated. It is adhered to the axis of rotation of the screw (112) and it is small cut with the rotating jet cutter prop (114) and the spice coming through the discharge hole (113) more naturally gets mixed in the salted dry fish.

Here, it is connected to the screw (112) and the role of mixing so that the gear (111) together driven according to the rotation of the screw (112) is equipped and the spice within the spice box (110) unite is played.

According to the present invention, it shows as the representative embodiment that a plurality of spice boxes (110) can be equipped but here 2 is installed. One is the container in which the basic spice enters. One is the container in which the functionality spice enters.

Here, the basic spice means the salt or sesame, the sugar etc. And the functionality spice means the various material including the curry or the garlic etc. For fitting to the various desire of consumer.

As described above, if sauce is mixed with the salted dry fish in the separate mixing vessel (60), spice does not get and taste and flavor of the spice intrinsic are more and more marked.

The configuration and operation are identical, it is installed at the roasting container (30) the agitating vane (100) and the switching means (70) equipped in the vent (74) one side are made. Therefore, rotates with the driving means (50) equipped at the upper part of the mixing vessel (60) the description is omitted.

In this way, automatically *** is dropped from the salted dry fish getting mixed in spice to the carrying box (80) of the lower part through opening and shutting device (74) and it is accepted.

As described above, it is set in the electronic circuit of the control panel (15) and all operations of being controlled in terms of automatically are automatically implemented according to the predetermined time and constant fixed quantity.

As described above, the invention was explained by the embodiment and the restricted drawing. But according to this, the invention is not restricted. And it is of course that correction and the various deformation are available in the technical field in which the invention belongs with a person skilled in the art in the equivalent range of the patent claim which is beneath written with the technical spirit of the present invention.

■ Effects of the Invention

According to the present invention, the salted dry fish which is automatically supplied with the cooking oil, the sesame oil and spice with a fixed quantity, and in which spice is mixed in the separate mixing vessel have the effect that it does not get on and it well gets mixed in spice and the taste and incense are more abundant in stock. And it is operated to the fully automatic the switching means being automatically opened and closed and, etc it is convenient. The salted dry fish of optimum can be massively produced.



Scope of Claims

Claim 1 :

As the roasting container (30) for parching the salted dry fish and the roasting apparatus consisting of the agitating vane (90) (100), the caster (14) is equipped in the upper side in the cover (11) and bottom surface. With the cooking oil line (131): in which the mixing vessel (60): of U-shaped including the agitating vane (90): which evenly mixes the salted dry fish it is rotated according to the inner circumference of the roasting container (30) it is connected and installed of the driving shaft (21) in the adhered case (10): and the switching means (40): equipped in the roasting container (30) one side in which the vent (34) is formed on the top of the case (10) of u-shaped and the first gear (44): which delivers the torque to the second gear (43) the second gear (43) connected in the switching means (40) to the door (41) is connected to the speed reduction motor (45) which delivers the power is inserted in the driving shaft (42) and roasting container (30) upper center and streamlined shape and driving means (20) and the switching means (70) mixing up the salted dry fish which is installed at the case (10) central part and parched in spice and spice box (110) and the sesame oil container (120) consecutively equipped in the upper one side of the case (10), and the cooking oil bottle (130): and the nozzle (132) in which the cooking oil is emitted it parches the salted dry fish it is connected to the cooking oil bottle (130) and hose at the upper part of the roasting container (30) of a plurality of parts is equipped to the constant interval and the sesame oil line (121) in which the nozzle (122) in which the sesame oil is emitted when being connected to the sesame oil container (120) and hose at the upper part of the mixing vessel (60) and mixing the salted dry fish with spice is equipped to the constant interval. The seaweed broiling apparatus which is installed at the lower part of the mixing vessel (60) vent (74) and is made of the carrying box (80) putting in the salted dry fish dropped down earlier than in the vent (74), and the control panel (15). As to the control panel (15), the electronic circuit setting the rotation quantity of the motor (23) (53) and speed reduction motor (45) (75) and time, and spice, the cooking oil and quantity of sesame oil and is automatically operated is adhered.

Claim 2 :

The seaweed broiling apparatus of claim 1, further comprising the first touch switch (46) which controls the angle of elevation of the door (41) it is adhered to one side of the vent (34) and the second touch switch (47) controlling the angle of depression.

Claim 3 :

The seaweed broiling apparatus of claim 1, further comprising the jet cutter prop (114) controlling the gear (111): which mixes sauce while going in gear between the screw (112) which is connected to the motor shaft at the lower part of the spice box (110) and spice is withdrawn to the discharge hole (113) formed in the cap (115) and rotating and the spice ejected through the discharge hole (113) as the predetermined amount.

Claim 4 :

The seaweed broiling apparatus of claim 1, wherein the agitating vane (90) of the streamlined shape is made of the round pipe.

 Drawings

Fig. 1

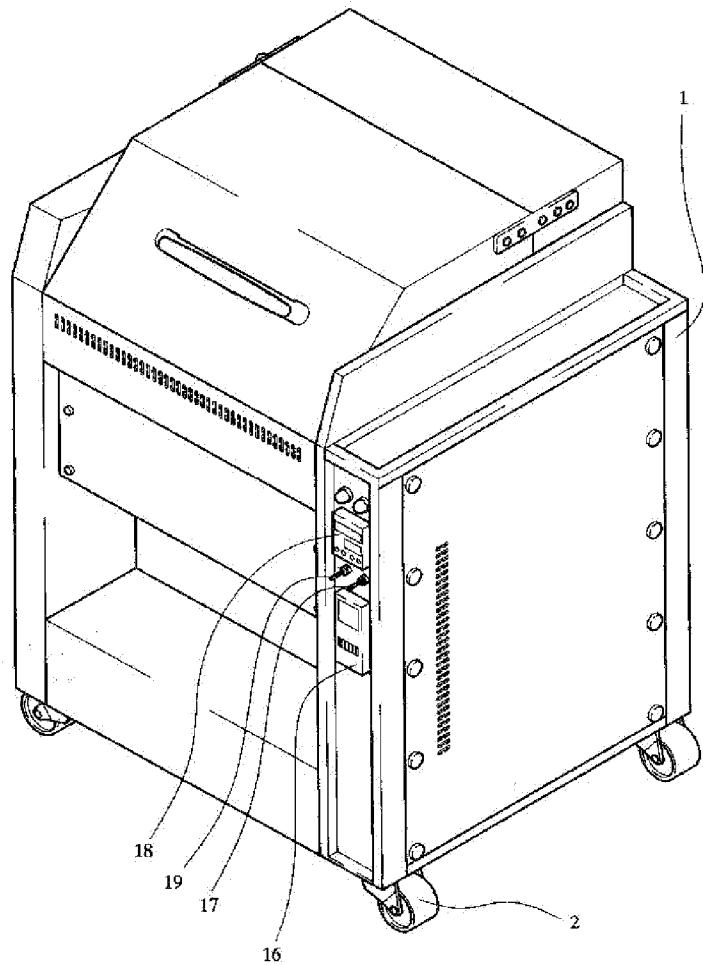


Fig. 2

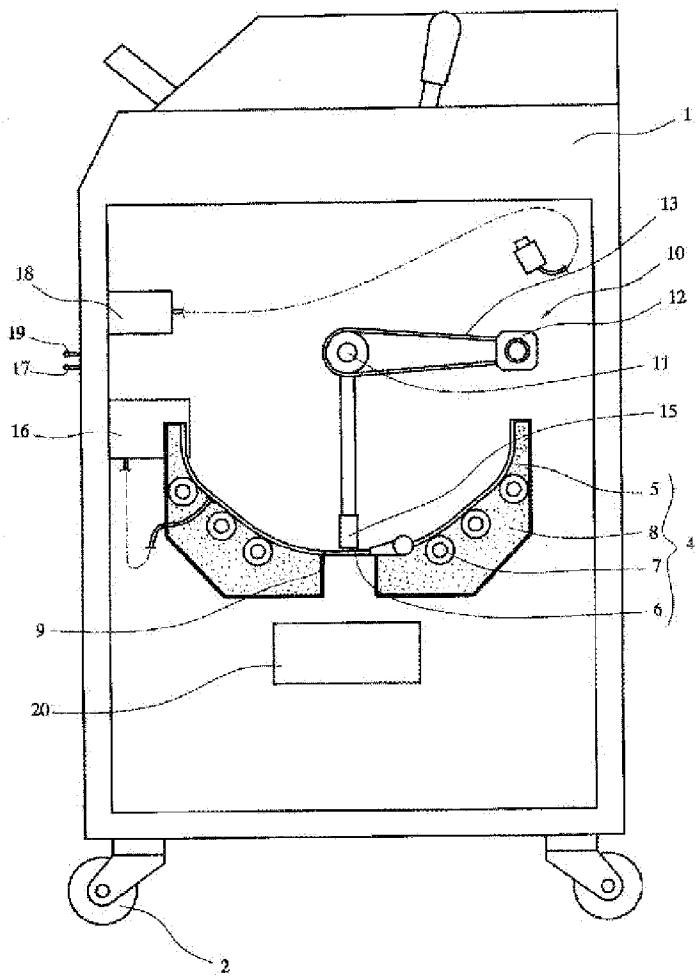


Fig. 3

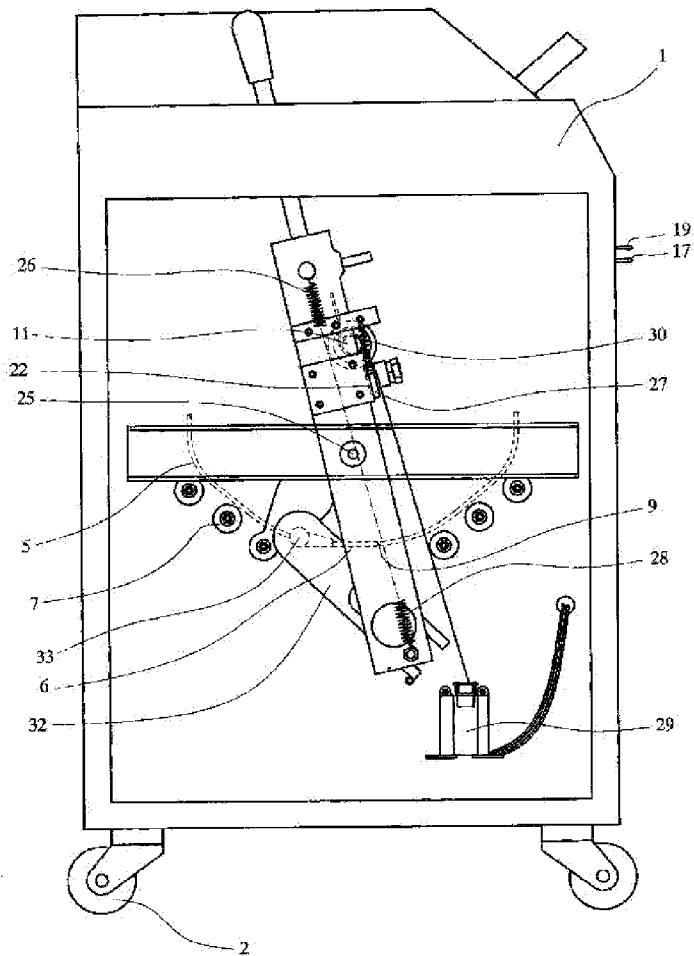


Fig. 4

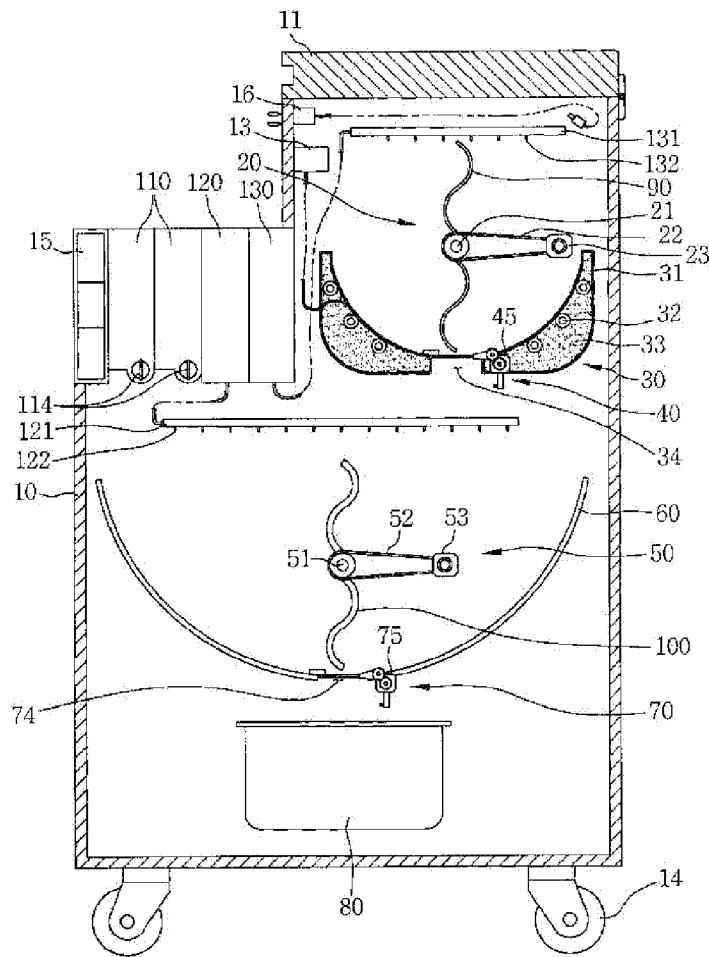


Fig. 5

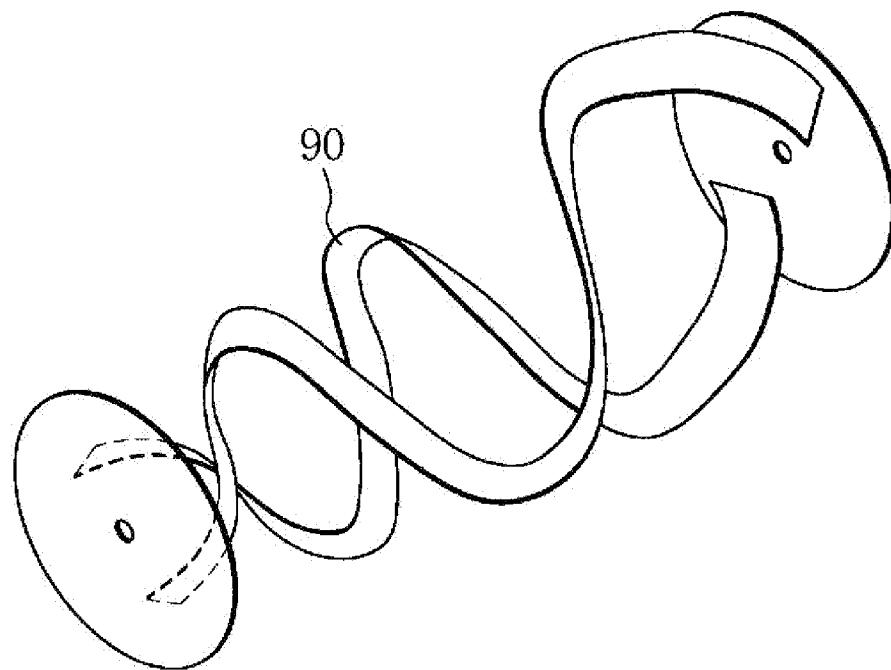


Fig. 6

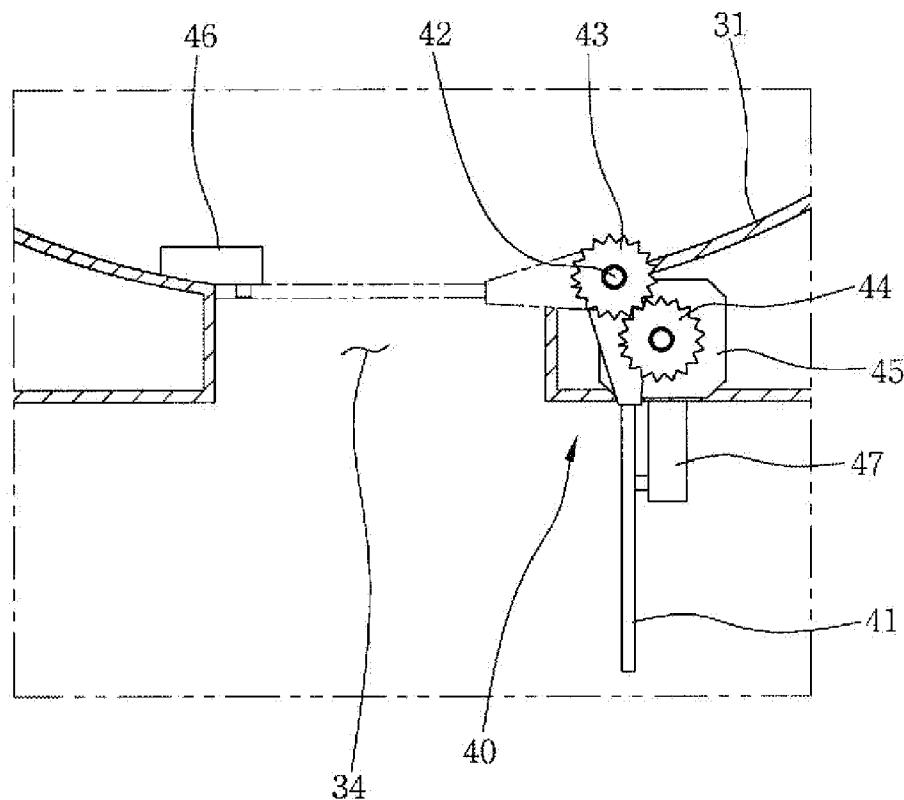


Fig. 7

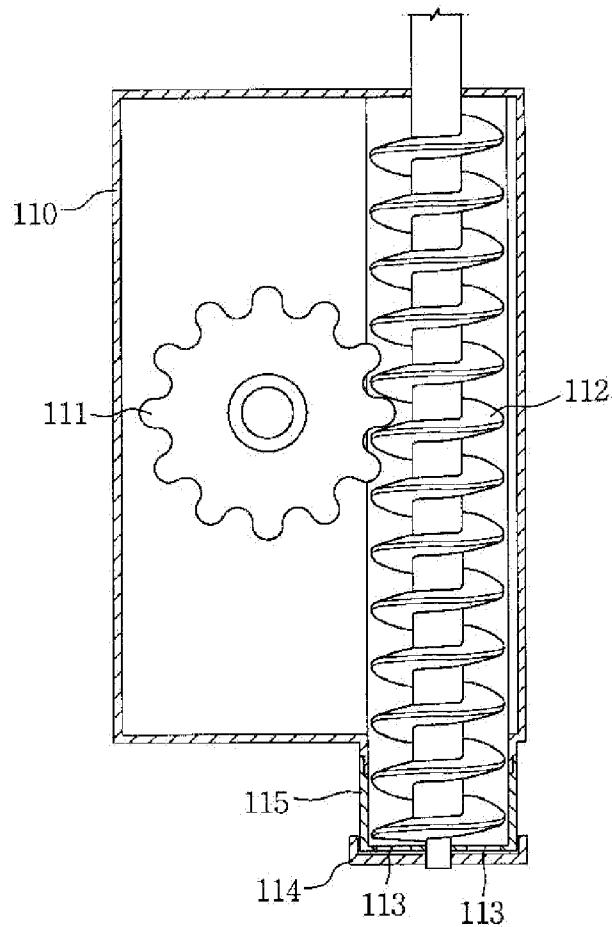


Fig. 8

